

EXHIBIT A-2



Expert Report of Derya Eryilmaz and Seabron Adamson

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK**

**SUSANNA MIRKIN AND BORIS MIRKIN, Individually and on Behalf of
All Others Similarly Situated**

v.

XOOM ENERGY, LLC, and XOOM ENERGY NEW YORK, LLC

No: 18 Civ. 2949 (ARR) (RER)

October 3, 2022

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1. Introduction

1. This is the Expert Report of Derya Eryilmaz, Ph.D. and Seabron Adamson on behalf of Susanna and Boris Mirkin (“Plaintiffs” or “the Mirkins”).

1.1 PARTIES TO THE DISPUTE

2. The Plaintiffs are a married couple and residents of Brooklyn, New York.¹ XOOM Energy LLC and XOOM Energy New York, LLC (together “XOOM” or “XOOM Energy”) are retail suppliers of electricity and natural gas to residential and commercial customers in the state of New York.²
3. We understand from the Amended Class Action Complaint and discovery materials in *Mirkin v. XOOM Energy, LLC*, No. 18 Civ. 2949 (AER)(RER) that the Mirkins were retail customers of XOOM Energy in New York, enrolling in XOOM’s “SimpleFlex” electricity plan. When the Mirkins enrolled, this XOOM plan provided an initial “teaser” rate of 8.99 cents per kilowatt-hour followed by rates which changed monthly, i.e., a variable rate.³
4. The Mirkins purchased power from XOOM Energy pursuant to an Electricity Sales Agreement (“SA” or “Sales Agreement”). The SA defined the pricing mechanism for variable price electricity sold under the SimpleFlex plan after an initial teaser period.⁴
5. We understand that the central issue in the lawsuit is whether the energy rates charged by XOOM Energy to its variable rate customers such as the Mirkins were consistent with the pricing terms of XOOM’s Sales Agreements for electricity and natural gas used by XOOM prior to February 11, 2016, which

¹ *Susanna Mirkin and Boris Mirkin, individually and on behalf of all others similarly situated v. XOOM Energy LLC and XOOM Energy New York LLC*, First Amended Class Action Complaint, August 21, 2019 (hereafter “Amended Complaint”).

² Amended Complaint, page 4.

³ Amended Complaint, page 15.

⁴ XOOM SimpleFlex Variable Price Product in Electricity Sales Agreement, Residential Service – New York, Exhibit 1 to the Amended Complaint (hereafter “Exhibit 1 to Amended Complaint”).

required XOOM to charge customers rates “based on XOOM’s actual and estimated supply costs...”⁵

6. It is our understanding that XOOM first began supplying electricity and gas to New York customers in or around January 2013.⁶ We also understand that the proposed Class of customers in this class action are all residential and commercial variable rate customers in New York who were enrolled in any of XOOM’s variable rate electricity and gas plans under these same pricing terms in the Electricity and Gas Sales Agreements used by XOOM prior to February 11, 2016 (the “proposed Class” or “Class”).⁷ With the caveats described in footnote 7, we performed our analysis using the data that XOOM produced in discovery which is understood to be the Class data encompassing this proposed Class definition.

1.2 PURPOSE OF EXPERT REPORT

7. We have been asked by counsel for the Plaintiffs to address the following specific issues:
- To provide an explanation of variable rate pricing of utility services by energy service companies (i.e., ESCOs), such as XOOM Energy in New York, and the changing regulatory and policy landscape for these services.

⁵ Exhibit 1 to Amended Complaint.

⁶ Data provided by XOOM in discovery starts in March 2013. Therefore, our Class damages calculations span the period beginning in March 2013 and ending in July 2021.

⁷ The proposed Class also includes customers who switched from a XOOM fixed rate plan to a XOOM variable rate plan after February 2016 but were provided the same pricing terms that were included in the pre-February 11, 2016 SAs. That group of customers was not included in the data provided by XOOM. Similarly, if there are XOOM customers who were first supplied energy from XOOM beginning on February 11, 2016 or later but who signed up using the pre-February 11, 2016 SA (which we understand did occur), these customers are not reflected in the data produced by XOOM. We expect there to be XOOM customers in this category because we understand that there is a lag between the date of enrollment and the date when energy is first supplied by XOOM, as was the case for the Mirkins. The latest enrollment date in the data we received was February 11, 2016. Class damages could end up being greater if this additional data is provided by XOOM.

- To explain the variable rate pricing by XOOM in the applicable Electricity and Gas Sales Agreements.
 - To determine whether XOOM set its rates as required by its Sales Agreements.
 - To develop a damages model that quantifies XOOM Energy's overcharges to the proposed Class if we determine that XOOM did not set its rates as required by its Sales Agreements.
8. Our opinions and damages model were developed by relying on (i) our expertise and experience in the energy industry and (ii) the data and documents produced by XOOM Energy in discovery, as well as the deposition testimony of XOOM employees. The list of data, documents, and depositions we considered is set forth in Exhibit 1.

1.3 QUALIFICATIONS AND ROLES

9. This section provides a short synopsis of our qualifications.

1.3.1 Derya Eryilmaz, Ph.D.

10. I am an energy economist with approximately 10 years of energy consulting experience in the electric power, oil, and gas pipeline industries.
11. Until recently I was a Principal in the energy practice of Charles River Associates ("CRA"), a global economics consulting firm headquartered in Boston. I am currently working as a contractor to CRA with respect to my work on this engagement.
12. My specific areas of concentration are in the applied economic analysis of the energy sector surrounding customer electricity consumption and pricing, energy forecasting, market power, market manipulation, and price discrimination issues for utilities in the United States and Canada. I also have extensive experience working with large data sets involving energy sector data. I have provided expert testimony support on various litigation and disputes and have worked on numerous federal and state regulatory filings involving energy disputes in the United States and Canada.
13. In addition to my consulting work, I teach Data Analytics and Energy Economics in the Department of Economics at Northeastern University. I have

had my work published in several peer-reviewed journals including the *Energy Journal*, *Energy Economics*, and the *Electricity Journal*. I received a Ph.D. in Applied Economics from the University of Minnesota.

14. My *curriculum vitae*, including a list of all publications authored in the previous 10 years and all cases in which I testified as an expert at trial or by deposition in the previous 4 years, is attached to the report as Exhibit 2.
15. In addition to co-authoring this expert report, I am primarily responsible for the data analysis and development of the quantitative damages model discussed herein. This work included synthesizing the substantial number of spreadsheets and other data produced by XOOM Energy and designing and developing the damages model which is presented here.

1.3.2 Seabron Adamson

16. I am a Vice President in the energy practice at CRA. I also lead the global energy disputes and regulatory segment of CRA's energy practice. I have more than 25 years of consulting and expert experience in the analysis of the electric power, natural gas, and related energy industries in the United States, Canada, the European Union, Latin America and Asia, and in other regions. I have been engaged to consult on market design, transmission, commercial, and regulatory issues in many jurisdictions, including the United States and Canada. This has included substantial work in New York. I have also served as an analyst in the gas and power sector for a major alternative investment firm.
17. Specifically relevant to the current dispute, I have advised electricity and gas retail companies on regulatory and commercial issues in the United States, Canada, and the United Kingdom and have substantial experience with ESCOs and how the energy industry has evolved in deregulated as well as regulated markets. I follow the regulatory, economic, and transactional developments in the U.S. energy industry from a range of sources, including discussions with clients and other industry experts.
18. In addition to my work at CRA, I teach a class on renewable energy project finance (MBA and Master's level) at the Carroll School of Management at Boston College. I am the co-author (with S. Raikar) of the textbook *Renewable Energy Finance: Theory and Practice*, published by the Academic Press

(Elsevier) in 2020. I have previously taught classes on energy finance and risk management at the A.B. Freeman School of Business at Tulane University in New Orleans and have served on the advisory board of the Tulane Energy Institute. I am also the co-founder and current chief financial officer of Quantum Diamond Technologies Inc., a technology company in the Boston area.

19. I have testified in or consulted on a number of disputes in the electric and gas utility sector.
20. I received B.S. and M.S. degrees in Physics and Applied Physics, respectively, from Georgia Tech and an S.M. degree in Technology and Policy (with an energy focus) from M.I.T. in 1992. In 2007, I received an M.A. degree in Economics from Boston University. I have published several articles regarding energy economics and finance in academic publications.
21. In addition to co-authoring this expert report, I am primarily responsible for the economic analysis of the pricing under XOOM's Sales Agreements and the policy and regulatory environment for variable rate pricing in New York.
22. My *curriculum vitae*, including a list of all publications authored in the previous 10 years and all cases in which I testified as an expert at trial or by deposition in the previous 4 years, is attached as Exhibit 3.

1.4 SUMMARY OF EXPERT OPINIONS

23. We have reached the following expert opinions with respect to the issues raised above:
 - (a) XOOM is an ESCO, which provides electric and gas utility services to retail customers (i.e., residential and commercial customers) in New York, including the Plaintiffs. ESCOs only provide electric or gas supply to retail customers and do not generate, transmit, or distribute the energy they sell.
 - (b) XOOM supplied electricity and natural gas to the Plaintiffs and the proposed Class of customers who enrolled in XOOM's variable rate plans under the

SA's original contract language used prior to February 11, 2016.⁸ From our review of the data XOOM provided, the number of customers in the proposed Class who enrolled and were supplied electricity or gas from XOOM totals 83,963: 52,832 for electric service, and 31,131 for gas service.⁹

- (c) We understand that both the Plaintiffs and the proposed Class of XOOM variable rate customers who enrolled prior to February 11, 2016 were all subject to the same rate pricing terms set forth in similar Sales Agreements. These agreements provide that XOOM would supply energy under a "variable rate" plan with pricing based on XOOM's "actual and estimated supply costs which may include but not be limited to prior period adjustments, inventory and balancing costs."¹⁰ Our detailed review of XOOM's rate-setting workbooks and other materials, however, shows that XOOM set its rates much higher than and inconsistently with the company's "Total Cost" reported in its rate setting workbooks.
- (d) Moreover, although XOOM's SAs state that the company's supply costs might include "prior period adjustments, inventory and balancing costs," we could not identify any substantiation in the data that XOOM provided in discovery that XOOM ever calculated any prior period adjustments or balancing costs. As for its inventory costs, the company only calculated these costs for its variable rate gas customers, but not its electric

⁸ As noted above, XOOM changed its Sales Agreement contract language on February 11, 2016. The initial contract used prior to February 11, 2016 was changed from "*Your monthly variable rate is based on XOOM's actual and estimated supply costs which may include but not be limited to prior period adjustments, inventory and balancing costs*" (Exhibit 1 to Amended Complaint) to "*Your rate is based upon a number of factors, which may include but not be limited to, the fluctuation of wholesale commodity costs or other components of wholesale prices (including but not limited to capacity related costs, fluctuations in energy supply and demand, and weather patterns) and XOOM's pricing strategies*" (XOOM_INIT_000162).

⁹ As mentioned above in footnote 7, XOOM did not provide data for the proposed Class members who switched from a fixed rate plan to a variable rate plan after February 2016 and were enrolled under the pre-February 11, 2016 contract language.

¹⁰ See Exhibit 1 to Amended Complaint.

customers. Most critically, XOOM did not provide any methodology for calculating these supposed costs during the rate setting process for its variable rate customers.

- (e) Our review of the deposition testimonies of multiple XOOM personnel involved in the setting of rates charged to Plaintiffs and the proposed Class further reveals that XOOM set its rates based on factors nowhere mentioned in its SAs, such as hitting margin goals, utility prices, other ESCOs' prices, attrition rates, the prior month's rate, and other factors unrelated to XOOM's actual or estimated supply costs for variable rate customers in New York.¹¹ These XOOM personnel concede that the foregoing factors are not actual or estimated supply costs. *Id.*, n.10.
- (f) Further, XOOM did not use any established formula to set its rates, but rather set its rates based on the ad hoc views of various employees from its Pricing and Product groups who met to set XOOM's prices for New York and for other states.¹² The rates that XOOM selected yielded high margins for XOOM substantially in excess of the actual and estimated supply costs that XOOM actually incurred. The rates charged to the Mirkins and XOOM's other variable rate customers thus appear to have been used simply to increase XOOM's profits, cross-subsidize other customer classes (e.g.,

¹¹ Deposition Transcript of Andrew Coppola, dated May 11, 2022 (hereafter "Coppola Tr.") at 37:11–38:4, 38:18–39:19, 50:8–51:6, 81:18–24, 82:14–83:6, 84:6–85:7, 98:11–18, 107:6–108:1, 125:4–17, 162:4–14, 168:22–169:3, 175:7–24, 233:17–234:9, 237:22–238:16, 238:21–239:3, 259:9–18; Deposition Transcript of Troy Chidester, dated June 24, 2022 (hereafter "Chidester Tr.") at 64:24–65:7, 68:17–24, 69:7–17, 99:8–14; Deposition Transcript of Ryan Park, dated July 22, 2022 (hereafter "Park Tr.") at 33:10–24, 36:17–37:3, 44:5–45:11, 53:11–54:12, 98:10–15, 99:20–100:22; Deposition Transcript of Jason Loehde, dated July 27, 2022 (hereafter "Loehde Tr.") at 219:5–22; Deposition Transcript of XOOM Energy, LLC and XOOM Energy New York, LLC, dated July 28, 2022 (hereafter "XOOM 30(b)(6) Tr.") at 83:10–23, 91:5–92:8, 264:6–18.

¹² Loehde Tr. at 60:3–61:19, 63:23–64:5; Park Tr. at 44:5–44:14, 197:19–198:25; Coppola Tr. at 88:10–14. See also XOOM_MIRKIN_065172 (Ryan Park telling his colleagues that he was "given guidance that if we have to squeeze a market, we should squeeze New York power," without any evidence that this was in response to increasing supply costs for New York electricity customers).

fixed-rate customers),¹³ and offset losses from other states. Within a service territory, all customers of the same type face similar supply market conditions, including energy costs.

- (g) ESCOs such as XOOM typically have substantially more information on energy costs than their customers. Recognizing the potential for customer abuse, New York (in December 2019) and Connecticut (in October 2015) banned the sale of energy under variable rate plans, such as the one offered to Plaintiffs and the Class.
- (h) We have calculated the overcharge damages to the Class under two different methods: (i) overcharges based on XOOM's own calculations of its actual and estimated supply costs – labeled by XOOM in its data as “Total Cost”; and (ii) overcharges based on applying the same margin that XOOM used for its fixed rate customers rather than the excessive margins that XOOM charged to variable rate customers. Damages have been calculated by month, customer type (residential or commercial), and utility region in New York.
- (i) It is important to note that our analyses relied upon the data requested and produced by XOOM in discovery. We assumed the data produced by XOOM in discovery is accurate and validated by XOOM. It is not in our scope to validate the data provided in discovery, including the accuracy of the costs reported.
- (j) Using XOOM's reported “Total Cost,” we calculated the overcharge to the proposed Class of residential and commercial electric and gas customers as approximately \$55 million.¹⁴ Using the margin that XOOM used for its fixed customers rather than the arbitrary and excessive margin that XOOM applied to its variable rate customers, we calculated the overcharge to the proposed Class of residential and commercial electric and gas customers

¹³ Cross-subsidization is a situation in which profits from one activity are used to pay for another activity that is making less money. See <https://dictionary.cambridge.org/us/dictionary/english/cross-subsidization>.

¹⁴ Damages could be higher if the categories of customers described above in footnote 6 had been included by XOOM in its interval data.

as approximately \$28 million. Our damage calculation methodologies and results are provided in Sections 3 and 4.

1.5 COMPENSATION

24. CRA is compensated at a rate of \$650 per hour for Mr. Adamson's time and \$430 per hour for Dr. Eryilmaz. All other CRA staff supporting this engagement are billed at their standard hourly rates.

2. XOOM and the Sales Agreement

25. XOOM Energy is an ESCO. ESCOs do not generate, transmit, or distribute electricity or gas to retail consumers, but instead arrange supply from the wholesale energy market. The host utility is responsible for billing the customer and manages customer payment risks. ESCOs such as XOOM Energy therefore play a limited role in serving the final utility customer. In effect, the ESCO replicates the energy procurement and risk management functions of the utility, while the utility does almost everything else.

26. We understand that the Plaintiffs enrolled in XOOM's SimpleFlex variable rate electricity supply plan in March 2013 and began receiving their energy supply from XOOM in May 2013. As is common in these plans, there was an initial fixed teaser rate, but we understand that the initial rate was fixed only for one month, May 2013. After this period, the Plaintiffs were billed using XOOM's "variable rate."¹⁵

2.1 PRICING UNDER THE SA

27. In the SA, XOOM states that pricing under its "XOOM SimpleFlex Variable Price Product" will be as follows:

*Your rate for energy purchases will be a variable rate, per kWh, that may change on a monthly basis, plus taxes and fees, if applicable. Your monthly variable rate is based on **XOOM's actual and estimated supply costs which may include but not be limited to prior period adjustments, inventory and***

¹⁵ Amended Complaint, page 15.

balancing costs. You are responsible for all charges assessed and billed by your local utility for all applicable utility charges, which are not included in your rate.¹⁶

28. We understand that this same language was used not just in the SA provided to the Plaintiffs but also to other residential and commercial and electricity and gas customers of XOOM Energy (including those customers who were supplied "clean energy"). We understand this language was also used in the SA given to customers who converted from fixed rate plans to variable rate plans and was apparently provided to customers who were acquired by XOOM from another ESCO, Planet Energy.¹⁷
29. We further understand that in February 2016, XOOM changed the contract language in the SA provided to New York customers who enrolled with XOOM in a variable rate product. The new contract language allowed XOOM to price energy "based upon a number of factors, which may include or be limited to, the fluctuation of wholesale commodity costs or other components of wholesale prices (including but not limited to capacity related costs, fluctuations in energy supply and demand, and weather patterns) and XOOM's pricing strategies."¹⁸
30. Despite the change in the contract language in February 2016, we understand that XOOM did not change its methodology for setting rates at that time and never differentiated between customers of one version of the SA versus the other when setting rates for its New York variable rate customers.¹⁹ This suggests that XOOM always used "XOOM's pricing strategies" when setting rates prior to February 11, 2016, even though this "factor" is not an actual or

¹⁶ Exhibit 1 to Amended Complaint. Bold emphasis added.

¹⁷ ECF No. 103 at 1 (motion to compel data about customers XOOM acquired from Planet Energy who were transitioned to a XOOM variable rate plan); Feb. 3, 2022 Hr'g Tr. at 10:10–23 (Judge Reyes granting motion to compel). We further understand that XOOM set variable rates for former Planet Energy customers in the same manner as all other variable rate customers, as the RSWs do not identify different rates for former Planet Energy customers.

¹⁸ XOOM_INIT_000162 Electricity Sales Agreement, Residential Service – New York (hereafter "February 2016 Sales Agreement").

¹⁹ XOOM 30(b)(6) Tr. at 20:5–10, 31:9–32:7, 132:12–136:8; Coppola Tr. at 277:16–278:1.

estimated “supply cost” includable under its pre-February 2016 SAs. And as we described above, XOOM’s pricing personnel also used other criteria not included in its Sales Agreements when setting the company’s rates for customers governed by the pre-February 2016 SAs.²⁰

2.2 “VARIABLE RATE” ESCO PRICING HAS COME UNDER INCREASED SCRUTINY

31. The pricing mechanism in XOOM’s SAs has obvious shortcomings. It is impossible for retail customers to know XOOM’s “actual or estimated supply costs,” and the rate to be paid is not known to the customer until they are presented with their bill.
32. In economic terms, the relationship between an ESCO, like XOOM Energy, and a retail customer may be characterized as an *information asymmetry*, in which one party to the transaction (XOOM) has better information than the other (customers such as the Plaintiffs). With substantial asymmetry of information, it is widely recognized that small consumers can find it difficult to make efficient choices and avoid being exploited by companies like XOOM.²¹
33. In December 2016, the New York Public Service Commission (“NYPSC”) determined that “the retail markets serving mass-market [residential and small commercial] customers are not providing sufficient competition or innovation to properly serve consumers.”²² The 2016 Notice stated that the NYPSC “had specific concerns about reports of customer abuses in the retail access market,

²⁰ Coppola Tr. at 37:11–38:4, 38:18–39:19, 50:8–51:6, 81:18–24, 82:14–83:6, 84:6–85:7, 98:11–18, 107:6–108:1, 125:4–17, 162:4–14, 168:22–169:3, 175:7–24, 233:17–234:9, 237:22–238:16, 238:21–239:3, 259:9–18; Chidester Tr. at 64:24–65:7, 68:17–24, 69:7–17, 99:8–14; Park Tr. at 33:10–24, 36:17–37:3, 44:5–45:11; 53:11–54:12, 98:10–15, 99:20–100:22; Loehde Tr. at 219:5–22; XOOM 30(b)(6) Tr. at 83:10–23, 91:5–92:8, 264:6–18.

²¹ Tirole, J. (1988). *The Theory of Industrial Organization*. The MIT Press Massachusetts Institute of Technology Cambridge, MA. Chapter 4.6.1.

²² NYPSC, Cases 15-M-0127 et al., “Notice of Evidentiary and Collaborative Tracks and Deadline for Initial Testimony and Exhibits”, issued December 2, 2016 (hereafter “2016 Notice”), quoted in “Order Adopting Changes to the Retail Access Energy Market and Establishing Further Process,” December 12, 2019 (hereafter “NYPSC 2019 Order”).

including ‘overcharging,’ as well as the lack of innovation with respect to energy efficiency and energy management services.”²³

34. After an extensive set of hearings and further investigation, the NYPSC went even further in its December 2019 Order. In this order, the NYPSC stated:

*“The record establishes that many of the concerns raised by the non-ESCO parties about the current operation of the retail access market are warranted. **The Commission shares those concerns, particularly regarding the lack of easily accessible and comprehensible product and pricing information and, the number of complaints alleging that bad-acting ESCOs were misleading and exploiting customers.** Thus, we conclude that significant changes to provisions governing retail access are needed to provide adequate protections for New York customers. If market participants are unwilling, or unable, to provide material benefits to customers beyond those provided by utilities in exchange for a regulated, just and reasonable rate, the market serves no proper purpose and should be ended.”*²⁴

35. The NYPSC concluded that the ESCOs offered so little value to retail customers and that their informational and customer abuse issues were so significant that variable rate products (such as those offered by XOOM) should be explicitly banned. Effective December 12, 2019, new variable rate plans could exist only if they offered guaranteed savings to customers, which the SA did not.²⁵ The NYPSC ordered:

“Because customers receive no value when they pay a premium for variable-rate commodity-only service from ESCOs, ESCOs will

²³ NYPSC 2019 Order at page 3.

²⁴ NYPSC 2019 Order at page 12. Bold emphasis added.

²⁵ There was also a carveout for plans offering green energy. NYPSC 2019 Order at page 23.

*be prohibited from offering variable-rate, commodity-only service except where the offering includes guaranteed savings.”*²⁶

36. Variable rate pricing, such as that contained in the SA, has also been banned in another state: Connecticut banned new variable rate pricing for retail electric service starting October 1, 2015.²⁷ A 2020 analysis by the Office of Consumer Counsel on continuing variable rate contracts concluded that these contracts created significant overcharges for ratepayers.²⁸

37. In summary, New York and Connecticut have concluded that variable rate pricing, such as that included in the SA, is ripe for abuse of customers by ESCOs, and have taken the extraordinary step of banning such contracts.

2.3 XOOM’S PRICING DOES NOT CONFORM WITH THE REQUIREMENTS OF ITS SALES AGREEMENTS

38. We understand that the core issue in the current litigation is whether XOOM’s pricing is consistent with the terms of the electricity and gas Sales Agreements provided to customers who signed up with XOOM. To analyze this issue, we reviewed the materials produced in discovery with respect to XOOM’s pricing.

39. We also understand that the Plaintiffs requested all costs from XOOM in discovery, including all the components of XOOM’s actual and estimated supply costs.²⁹ We were informed by Plaintiffs’ counsel that in response to the discovery demands, XOOM produced documents and data that quantify its actual or estimated supply costs, including all rate-setting workbooks and other relevant documents that were retrieved by a broad list of search terms.

40. XOOM produced several data sets regarding its costs and rates. We have relied on four key datasets produced by XOOM to analyze its pricing for variable rate electric and gas customers: (i) customer meter data; (ii) rate-

²⁶ NYPSC 2019 Order at page 39.

²⁷ State of Connecticut Office of Legislative Research, “Electric Supplier Variable Rates,” January 6, 2021.

²⁸ Connecticut Office of the Consumer Counsel, “OCC Fact Sheet: Electric Supplier Market, Legacy Variable Rate Analysis,” March 5, 2020.

²⁹ See Responses to Plaintiffs’ First Requests for the Production of Documents to All Defendants, dated December 24, 2019, at 21–26 (Requests 38, 41–47).

setting workbooks; (iii) margin analysis reports; and (iv) an aggregated utility price workbook. These workbooks were produced in a large number of Microsoft Excel files.³⁰

41. Using these workbooks, we compiled electric and gas datasets for both residential and commercial customer classes to conduct our analyses. Our compiled datasets span from March 2013 to February 2022.
42. The XOOM customer meter data (or “Interval Data”) includes each customer’s enrollment number, start and end dates of variable rate coverage, monthly rate and usage, utility service territory, and product type that was offered to a given customer. The Interval Data was produced in the form of seven Microsoft Excel files, with one row provided for each month a customer was enrolled in a XOOM variable rate plan. The Interval Data includes all forms of XOOM’s variable rate plans, including the SimpleFlex Plan, the BizChoice Plan, and the Basic Plan.³¹
43. XOOM produced in discovery a large number of rate-setting workbooks (“RSWs”) that include details on the rate XOOM charged and various cost elements by month, customer type (e.g., residential or commercial), product type, and utility service territory within New York.
44. The electric RSWs include a build-up of costs that adds up to a “Total Cost” value, differentiated again by month, customer type, product type, and utility region.³² This “Total Cost” sums New York Independent System Operator (“NYISO”) costs for electric supply, including energy, shaping, ancillary services, capacity, renewable energy certificate (“REC”) costs, losses, and

³⁰ We understand that the data produced by XOOM in compliance with Judge Reyes’s Order granting Plaintiffs’ January 2022 motion to compel documents and data of fixed-to-variable rate customers and former Planet Energy customers (ECF No. 105) is the Class data and we used that Class data to calculate damages. Email from Diane Wizig dated April 8, 2022, Subject: Mirkin v. XOOM - Supplemental Production.

³¹ The full list of product types includes Basic Plan, BizChoice, BizChoice Prevailing, BizSimpleClean, Prevailing BizChoice, Prevailing Rate, Resi Basic Plan, Resi Prevailing Rate, SMB Basic Plan, SimpleClean, and SimpleFlex. All introductory, promotional product types are excluded from analysis.

³² For example, see XOOM_INIT_001838.

retail collateral. The electric RSWs also provide the proposed rate to charge and margins.

45. XOOM also produced RSWs for gas supply.³³ These build up to a “Total Cost,” which includes the gas futures commodity price (“NYMEX”), basis, fixed and variable storage costs, fixed and variable pipeline costs, and other fees. Proposed gas rates and calculated margins are also provided in the gas RSWs.
46. It is important to note that these rate-setting workbooks were produced separately for every month throughout the analysis period up until July 2021. As a result, our damage analysis is calculated between the period of March 2013 to July 2021. It is our understanding that these RSWs were subject to change by XOOM and some may have been non-final.³⁴ From the information provided in these workbooks, we were unable to determine the final RSW in every case, as some months included multiple RSWs. We used the best available information presented in these workbooks and consolidated them to obtain our datasets for analysis.
47. There is no evidence that the RSWs build up to the rate charged. While the RSWs do contain elements that build up to what they call “Total Cost,” they never calculate XOOM’s total estimated or actual costs accounting for prior period adjustments, inventory, and balancing costs as provided in the Sales Agreements. The actual costs calculated (i.e., “Total Cost”) are much lower than the variable rates that XOOM actually charged its New York customers.
48. Another data source we rely upon is the cumulative margin analysis produced by XOOM.³⁵ This margin analysis contains the full record of XOOM’s monthly rates and margin percentages by customer type, product type, and utility service territory from March 2013 to February 2018.

³³ For example, see XOOM_INIT_001700.

³⁴ XOOM 30(b)(6) Tr. at 86:13–21, 248:17–24, 286:11–18.

³⁵ XOOM_MIRKIN_028684.

49. Lastly, XOOM produced its aggregated workbook of historical gas and electric utility prices by customer type.³⁶ This data source reports utility prices starting from April 2009 and ending in November 2019.

2.4 XOOM'S RATES CHARGED TO CUSTOMERS ARE MUCH HIGHER THAN ITS TOTAL ACTUAL REPORTED COSTS

50. Our analysis of XOOM's many pricing and margin files reveals that XOOM's actual "Total Costs" are generally substantially lower than the rate charged to the proposed Class of customers.
51. Indeed, the absence of any estimated or actual inventory costs, prior period adjustments, or balancing costs in its RSWs (i.e., the referenced cost factors in the Sales Agreements) demonstrate that XOOM did not directly consider and value any of these cost components when setting rates for its New York variable rate customers.
52. Instead, XOOM simply calculated and reported its actual costs of supplying electricity and gas as a sum total called "Total Cost." But contrary to its Sales Agreements with the Plaintiffs and the proposed Class, XOOM charged rates far in excess of the total costs it self-reported. The rate-setting workbooks that XOOM created show that the rates charged are not based on any observable calculations, but rather are arbitrarily selected by XOOM personnel during XOOM's rate-setting meetings. With these set rates, a margin is then determined by a backward calculation of the rate subtracted by the "Total Cost." These workbooks fail to include or provide any "actual or estimated" costs that would add up to the excessively high rates charged to the Plaintiffs and the Class.
53. This observation is confirmed by the deposition testimony of Ryan Park, the former Director of Product Management for XOOM's Supply Team, who confirmed that in XOOM's rate-setting meetings, no specific formula was used to determine the rates. Costs were the starting point for the rates, but the discussion around the "final piece" was included in a so-called "margin," which

³⁶ XOOM_MIRKIN_032622.

included elements not related to XOOM's supply costs, such as XOOM's profit goals, utility rates, competitive intelligence, and attrition.³⁷

54. While XOOM does not appear to have calculated prior period adjustments, it does appear to have considered prior period losses in setting rates, although these may not have even been from New York customers and hence cannot have reflected the actual supply costs of those customers. For example, Jason Loehde, Senior Director of Pricing and Structure at XOOM, confirmed that while XOOM did not suffer losses in the New York market in 2014, it nonetheless raised rates to New York variable rate customers, such as the Plaintiffs, to make up for corporate losses in the Pennsylvania/Maryland mid-Atlantic markets.³⁸ In this way, XOOM used prior period adjustments to increase rates for New York customers whose prior period rates had not led to XOOM losses.
55. It is also noteworthy that our analysis of the margin reports demonstrates that XOOM charged higher margins to its variable rate customers than to its fixed rate customers. XOOM's Product Portfolio Manager Troy Chidester testified that it was generally true that variable rate products would have higher margins than fixed rate products in New York.³⁹ This was shown to be true during 2013 through 2021, as can be seen in Table 1 below.⁴⁰
56. XOOM's pricing personnel and its internal documents acknowledged that variable rate customers created lower risks than fixed rate customers, as XOOM had flexibility to adjust the rates of variable rate customers in response to changes in costs but it did not have that same ability with respect to its fixed

³⁷ Park Tr. at 44:5–45:11.

³⁸ Loehde Tr. at 219:5–22, 249:2–250:11.

³⁹ Deposition Transcript of Troy Chidester, dated June 24, 2022 (hereafter "Chidester Tr.") at 133:6–134:19, 137:18–138:2.

⁴⁰ This disparity occurred despite the fact that fixed rate products are riskier than variable rate products for XOOM, as XOOM has no ability with fixed rate products to increase rates for its current fixed rate customers if costs increase (or if customer energy usage increases beyond that anticipated), but it did have some flexibility under the SA to increase rates when costs increased for variable rate customers. Park Tr. at 60:5–22; Coppola Tr. at 167:22–168:14, 191:25–192:19; Loehde Tr. at 215:12–21.

rate customers.⁴¹ Yet the company still charged these variable rate customers substantially higher margins (untethered to costs) than the margins used for fixed rate customers. XOOM also used variable rate customers to cross-subsidize its fixed rate customers.⁴²

57. Both variable rate customers and fixed rate customers were profitable for XOOM.⁴³
58. Importantly, we understand that XOOM's price setting methods did not change, even after XOOM implemented new contract language after February 11, 2016 that allowed XOOM to consider its "pricing strategies" when setting rates.⁴⁴ This suggests that instead of following the contractual terms in the pre-February 2016 Sales Agreements, which required that its prices be set according to its "actual and estimated supply costs," XOOM applied its own self-serving "pricing strategies" even before the contract changed, and charged Plaintiffs and the Potential Class rates inconsistent with their Supply Agreements. The deposition testimony is clear that "pricing strategies" were taken into account throughout the relevant time, including by focusing on hitting company target margins.⁴⁵
59. Our analysis shows that XOOM's margins for variable rate customers appear arbitrarily high and significantly higher than margins charged to comparable fixed rate customers, despite the fact that XOOM took on greater risks for fixed rate customers since XOOM had no ability to reset existing fixed rate customers' rates during the fixed rate period.⁴⁶ Thus, we have seen no

⁴¹ Loehde Tr. at 221:13–23; Deposition transcript of Thomas Ulry, dated May 12, 2022 (hereafter "Ulry Tr.") at 86:4–88:9. *See also* XOOM_MIRKIN_016476 ("In a side by side comparison, fixed products have no means for claw backs making them riskier / less valuable"; "Having a large fixed book restricts our ability to claw back costs").

⁴² XOOM_MIRKIN_015251 (Ryan Park acknowledging that XOOM "subsidize[s] the lower fixed rate margins with higher variable rate margins").

⁴³ Coppola Tr. at 198:4-8.

⁴⁴ XOOM 30(b)(6) Tr. at 20:5–10, 31:9–32:7, 132:12–136:8; Coppola Tr. at 277:16–278:1.

⁴⁵ Ulry Tr. at 44:3–47:12; Coppola Tr. at 81:18-24, 82:14–83:6, 84:6–85:7, 97:22–98:14, 233:17–234:9, 237:22–238:16; Park Tr. at 36:17–37:3, 98:10–15; XOOM 30(b)(6) Tr. at 133:7–135:15, 264:6–18.

⁴⁶ Coppola Tr. at 180:1–181:13.

evidence that XOOM attempted to build up or justify the higher margins it charged to variable rate customers over fixed rate customers.

3. Calculation of Damages

60. We calculated damages based on XOOM's "actual and estimated supply costs" presented in the data and documents that XOOM produced in discovery. Specifically, the "actual and estimated supply costs" are represented as the "Total Cost" component of XOOM's rate-setting workbooks.

61. In this section, we describe two methods for estimating damages for XOOM overcharges using the information and data available from discovery:

- (a) Method 1: Overcharges calculated using XOOM's reported "Total Costs" of supplying electricity or gas in the corresponding month.
- (b) Method 2: Overcharges using excess margins charged to variable rate customers over corresponding margins charged to fixed rate customers.

3.1 OVERCHARGES BASED ON XOOM'S REPORTED TOTAL COSTS (METHOD 1)

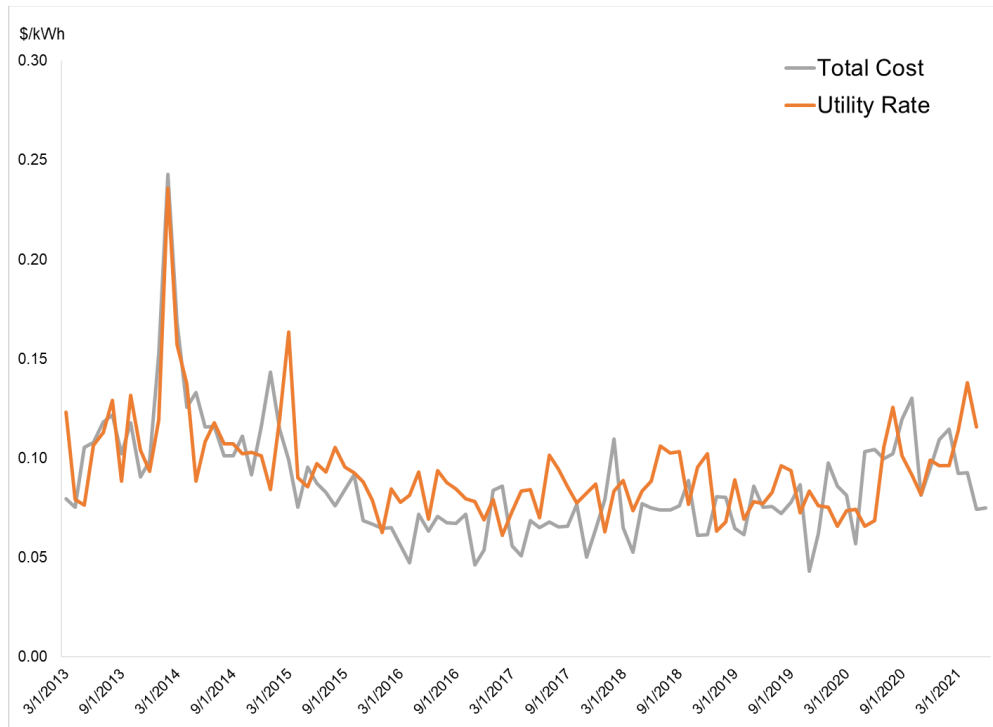
62. XOOM created rate-setting workbooks in each month as part of its rate determination process. The electricity RSWs added up various elements of XOOM's supply costs as discussed above. The gas RSWs made similar calculations for gas supply costs. In the RSWs, a margin was calculated as the difference (both as a percentage and as cents/kWh) between the rate charged and the Total Cost. For the period of March 2013 through February 2018, we calculated what XOOM reported was the Total Cost from the data in the cumulative margin analysis report. The margin reports were used instead of the RSWs for that period because the margin reports were based on the final rates that XOOM set, whereas it was unclear which RSWs included the final rates as opposed to rates under discussion for purposes of a rate-setting meeting. For periods after February 2018, the Total Cost was taken from the RSWs for those periods in which we had the relevant RSWs and, in months where there was more than one RSW, we used the last-modified RSW for this purpose. The variable rates charged by XOOM were compiled from XOOM's customer-level

interval data and determined by taking the mode across all variable rates charged for each monthly period.⁴⁷

63. As described above, XOOM never quantified or detailed other potential cost categories described in the SAs, including prior period adjustments, inventory, or balancing costs. The gas RSWs include storage-related costs (related to inventory), but inventory or balancing costs were not explicitly calculated using the information provided in the RSWs. There is also no quantification of prior period adjustment costs. These costs are thus not represented in this damages method.
64. Under this approach, we calculated damages by comparing XOOM's actual rate to its reported "Total Cost." The damages were calculated as the difference between the variable rates charged by XOOM and the Total Cost, multiplied by the total energy usage for the month.
65. The total amount of damages under Method 1 are \$55,179,685. Full detailed calculations are provided in Exhibit 4 and the associated workpapers.
66. As a cross-check to the damages calculated under Method 1, we analyzed the applicable utility rates during this same time to confirm the overcharges calculated based on XOOM's actual and estimated supply cost calculations.
67. Figure 1 below shows that XOOM's Total Costs and the utility rate track each other during the relevant period.

⁴⁷ As a cross-check, we compared variable rates taken from the interval data for residential electric customers against the historical XOOM variable electric rates reported by Defendants in XOOM_INIT_001119-28. Only 6 data points out of more than 750 for electric residential variable rate customers needed to be adjusted to match the rates reported in XOOM_INIT_001119-28. We thus believe that our methodology is reliable to determine the correct rate charged by XOOM each month. Because it was sometimes unclear whether a RSW showed the actually-implemented rate in a given month, we did not use the RSWs for purposes of compiling the historical variable rates for XOOM customers.

Figure 1: XOOM Total Cost and Utility Rate for Residential ConEdison – Zone J Service Territory



68. This is unsurprising because, as a general matter, the utility rate covers the same set of general supply costs as the supply costs of an ESCO such as XOOM, including energy, ancillary services, capacity, RECs, etc. These are the same costs as reflected in XOOM's "Total Cost" calculations described above. Comparable utility rate charges are thus a benchmark for the legitimate supply costs, and they vary frequently in a similar fashion as the XOOM variable rates. Utilities in New York buy electricity on the wholesale market, which is a competitive open market that ESCOs like XOOM can also use. Because XOOM is a middleman that purchases energy on the wholesale market and resells that energy to its customers, the cost of wholesale energy and related elements is the primary component of XOOM's actual and estimated supply costs.

69. XOOM itself used the utility rate when it needed to refund customers for overcharges claimed directly by individual customers or the NYPSC. XOOM's Compliance Officer Patricia Kulesa testified that when XOOM refunds customers in instances when the Public Service Commission finds that there were problems during the customer enrollment process or when XOOM's

internal investigation finds that there was wrongdoing or “something broke” on XOOM’s end, XOOM re-rates the customer using the utility rate in the utility market where the customer was located.⁴⁸ In instances where a re-rate was done using the utility rate, Ms. Kulesa acknowledged that it would generally result in XOOM making a payment to the customer.⁴⁹ This is unsurprising, because for XOOM variable rate customers, the applicable utility rate is generally lower than the variable rate that XOOM charges its customers.

70. Finally, we note that the NYPSC has extensively used the applicable utility rate as the basis of comparison for ESCO variable rates, even while accounting for when alleged ESCO “value-added products or services” were bundled with the commodity.⁵⁰

71. We compared the variable rates that XOOM charged its customers in various market areas with the rates charged by each respective utility using the information provided by XOOM. The calculation is defined as the difference between the variable rates charged by XOOM and the corresponding utility rate, multiplied by the total energy usage for the month.

72. This utility rate cross-check found the total amount of damages to be \$49,552,057. This is similar to the damages calculated under Method 1 (\$55,179,685) using XOOM’s Total Cost calculations and confirms that XOOM was charging excessive rates well above its actual and estimated supply costs.

3.2 OVERCHARGES BASED ON EXCESS MARGIN CHARGED TO VARIABLE CUSTOMERS (METHOD 2)

73. We anticipate that XOOM may argue that it was allowed to include a margin when setting rates under the Sales Agreements, even though no such “margin” was included in the relevant pricing terms. From the stated contractual terms of the Sales Agreements, there does not appear to be any scope for a margin to be included in the supply costs chargeable to customers. But if the Court or a jury were to find otherwise, as an alternative damages model, we have

⁴⁸ Deposition Transcript of Patricia Kulesa, dated June 29, 2022 (hereafter “Kulesa Tr.”) at 90:10–24, 100:4–11, 137:25–138:12, 179:17–180:4.

⁴⁹ Kulesa Tr. at 102:5–9.

⁵⁰ NYPSC 2019 Order, page 8.

determined that XOOM still substantially overcharged its customers by imposing an unreasonably high margin on its variable rate customers as compared to its fixed rate customers. To address this issue, our alternative model allows XOOM a margin over Total Cost that equates to the fixed rate margin applied to its fixed rate customers. To calculate the damages, we used XOOM's self-reported margins on fixed rate contracts for the same product by region and month as provided in both the margin analysis report and the RSWs.⁵¹

74. As described above, XOOM added a margin to its variable customers' rates which is unrelated to its costs. The margins are not consistently tied to any increase or decrease in XOOM's actual and estimated supply costs.

75. As can be seen in Table 1 below, XOOM's margins on fixed rate contracts were generally substantially smaller than the corresponding variable rate contracts. This was confirmed by XOOM documents and witnesses.⁵² This occurred despite the fact that, as XOOM witness Loehde noted, fixed rate contracts carry greater risks to XOOM since the price cannot be adjusted once it has been fixed.⁵³ It appears that XOOM was able to operate and make a reasonable profit selling fixed rate contracts with substantially lower margins than variable contracts, and yet arbitrarily imposed much higher margins on their variable rate customers.

⁵¹ If the Court or factfinder determines that a different margin was appropriate here (e.g., 10%), we would easily be able to update our calculations to reflect a different margin assumption.

⁵² *E.g.*, Chidester Tr. at 133:6–134:19, 137:18–138:2.

⁵³ Loehde Tr. at 221:13–23.

Table 1: Comparison of XOOM variable and fixed rate margins from March 2013 to February 2018

Electric Margin Percentages				
Year	Residential		Commercial	
	SimpleFlex Variable Plan	SureLock Fixed Plan	BizChoice Variable Plan	BizLock Fixed Plan
2013	18%	15%	16%	13%
2014	32%	16%	32%	16%
2015	39%	22%	38%	20%
2016	44%	19%	43%	18%
2017	35%	19%	42%	17%
2018	19%	19%	29%	16%

Gas Margin Percentages				
Year	Residential		Commercial	
	SimpleFlex Variable Plan	SureLock Fixed Plan	BizChoice Variable Plan	BizLock Fixed Plan
2013	23%	19%	25%	19%
2014	23%	20%	25%	19%
2015	35%	23%	36%	23%
2016	34%	20%	35%	21%
2017	33%	20%	37%	19%
2018	31%	23%	33%	22%

Note: Table shows annual average of reported monthly margins.

76. By allowing XOOM a margin equivalent to its fixed rate margins – averaging approximately 19% – our damage model anticipates a potential argument by XOOM that it was permitted to include a margin. Given these facts, the margin on variable rate contracts should not be higher than the margin on the corresponding fixed rate contracts on average. As shown below, variable rate margins (SimpleFlex, BizChoice) were much higher than fixed rate margins (SureLock, BizLock) for most of the 2013–2018 period, including multiple years in which the variable rate margins were *double* those of the fixed rate margins. XOOM has no legitimate explanation for why it would charge margins in the 30%-and-upward range for its variable rate customers while at the same time setting a profitable margin of approximately 19% for its fixed rate customers.
77. The total amount of damages under Method 2 are \$27,667,813. Full detailed calculations are provided in Exhibit 5 and the associated workpapers.

4. Summary of Damage Estimates

78. As discussed above, under Method 1 total damages are \$55,179,685 and under Method 2 total damages are \$27,667,813.

79. We reserve the right to change or modify this report if we are subsequently provided with additional data or information.

Derya Eryilmaz, Ph.D.

A handwritten signature in black ink, appearing to be 'Derya Eryilmaz', written over a horizontal line.

Seabron Adamson

A handwritten signature in black ink, appearing to be 'Seabron Adamson', written over a horizontal line.